REMARKS

In the Office Action, the Examiner rejected claims 1-18 under § 102 as being anticipated by USP 5,742,086 issued to Rostoker et al. (Rostoker). In this Response, Applicants have not amended, deleted, or added any claims. Accordingly, claims 1-18 will be pending after entry of this Response.

I. Provisional Double Patenting Rejection

The Examiner provisionally rejected claims 1-18 under the judicially created doctrine of nonstatutory double patenting. Accompanying this Response is a Terminal Disclaimer that disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 to 156 and 173, as shortened by any terminal disclaimer filed prior to the grant of the Applications numbered **09/732,181, 09/739,460, and 09/731,891**.

Accompanying this Terminal Disclaimer are (1) a Chain of Title under 37 CFR 3.73(b) identifying Cadence Design Systems, Inc. as the Assignee of the present application, and (2) a Power of Attorney from Cadence Design Systems, Inc. identifying Mani Adeli as the attorney of record for this case. The Chain of Title is accompanied by Assignments from the inventors of the present application to Simplex Solutions, Inc. and a Certificate of Merger merging Simplex Solutions, Inc. into Cadence Design Systems, Inc

II. Claims 1-9

The Examiner rejected claims 1-9 under § 102 as being anticipated by Rostoker. Applicants respectfully traverse this rejection.

Claims 2-9 are dependent directly or indirectly on independent claim 1. Claim 1 recites a method of computing placement costs for a placer that partitions a region of a circuit layout into several sub-regions. This method identifies, for a set of sub-regions, a connection graph that connects the set of sub-regions, where the connection graph has at least one edge that is at least partially diagonal. The method then identifies a placement cost from an attribute of the connection graph.

Applicants respectfully submit that Rostoker does not disclose teach, or even suggest such a method. Specifically, Applicants respectfully submit that Rostoker does not disclose a method for computing placement costs for a placer, which:

- for a set of sub-regions, identifies a connection graph that connects the set of sub-regions, where the connection graph has at least one edge that is at least partially diagonal; and

- identifies a placement cost from an attribute of the connection graph.

The Examiner identifies Figure 71 and column 59 of Rostoker as disclosing the identification of a connection graph element of claim 1. However, as characterized by the examiner, these passages of Rostoker disclose a "three directional/diagonal routing Steiner tree" implemented during a routing operation. This routing operation as disclosed in Rostoker transpires after a placement operation. Therefore, Rostoker does not disclose, teach or even suggest the recited method of claim 1, which computes **placement costs for a placer** by **identifying a connection graph** that connects a set of sub-regions and identifying a **placement cost from an attribute of the connection graph**.

The Examiner identifies column 58, column 43 lines 22-30, column 44 lines 46+, and column 45 lines 21-26 of Rostoker as disclosing the identification of a placement cost from an attribute of the connection graph element of claim 1. However, these passages of Rostoker disclose computing costs without reference to an attribute of a connection graph. These costs disclosed in Rostoker are computed prior to the disclosure of the "three-directional/diagonal routing Steiner tree" for which the Examiner identifies as a connection graph. Therefore, Rostoker does not disclose, teach, or even suggest the recited method of claim 1, which computes placement costs for a placer by identifying a **placement cost from an attribute of a connection graph**.

Accordingly, Applicants respectfully submit that Rostoker does not render claim 1 unpatentable. As claims 2-9 are dependent on claim 1, Applicants respectfully submit that claims 2-9 are patentable over Rostoker for at least the same reasons. In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the § 102 rejection of claims 1-9.

III. Claims 10-18

The Examiner rejected claims 10-18 under § 102 as being anticipated by Rostoker. Applicants respectfully traverse this rejection.

Claim 10 is analogous to claim 1, except that claim 10 recites a program embedded in a computer readable medium, whereas claim 1 recites a method. Accordingly, Applicants respectfully submit that claim 10 is patentable over Rostoker for the same reasons as claim 1. Moreover, as claims 11-18 are dependent on claim 10, Applicants respectfully submit that claims 11-19 are patentable over Rostoker for at least the same reasons. In view of the foregoing,

Applicants respectfully request reconsideration and withdrawal of the § 102 rejection of claims 10-18.

CONCLUSION

In view of the foregoing, it is submitted that all pending claims, namely claims 1-18, are in condition for allowance. Reconsideration of the rejections and objections is requested. Allowance is earnestly solicited at the earliest possible date.

Respectfully submitted,

STATTLER, JOHANSEN & ADELI LLP

Dated: July 13, 2004

Mani Adeli
Reg. No. 39,585

Stattler Johansen & Adeli LLP
PO Box 51860
Palo Alto, CA 94303-0728
Phone: (650) 752-0990 ext.102
Fax: (650) 752-0995